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Thomas, Josef [DE/DE]; Karl-Arnoldstr 22, Meerbusch  
(DE).

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(74) Agents: **DONALD, Heather, June** et al.; Spoor & Fisher,  
P.O. Box 41312, Craighall, 2146 Morningside (ZA).

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(71) Applicant (*for all designated States except US*): **ELE-  
MENT SIX LIMITED** [GB/GB]; Isle of Man Freeport,  
Ballasalle, Isle of Man IM99 6AQ (GB).

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(71) Applicant (*for MW only*): **DONALD, Heather, June**  
[ZA/ZA]; Rochester Place, 173 Rivonia Road 2057, 2057  
Morningside (ZA).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **WHITEHEAD, An-  
drew, John** [GB/GB]; 60 Cheylesmore Drive, Camberley,  
Surrey GU16 9BW (GB). **VAN OERLE, Bartholomeus,**  
**Mathias** [NL/NL]; Stieltjesstraat 35, NL-6511 Nijmegen  
(NL). **WORT, Christopher, John, Howard** [GB/GB]; 61  
Upthorpe Drive, Wantage Oxfordshire (GB). **SCHAICH,**

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(54) Title: DIAMOND BONDING

(57) Abstract: A method of producing a bonded structure which includes a layer of material capable of forming a diffusion or diffusion-type bond with diamond bonded to a diamond element. The method includes the step of applying electron beam heating to a localised region of contacting surfaces between the diamond and the layer of material, or the layer of material and a surface of a metal element or structure to cause bonding of at least some of the contacting surfaces in that region. The method has particular application to the bonding of a layer of diamond to a frame or mount.



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